

CLAIMS

Claims 31-35 and 39-55 are pending in the application.

Claims 1-30 (canceled).

Claim 31 (previously presented): An MN antisense construct comprising a nucleic acid sequence from which an MN antisense oligonucleotide is transcribable, wherein said nucleic acid sequence is operably linked to an expression control sequence in a vector, wherein said MN antisense oligonucleotide is complementary to SEQ ID NO: 5, and wherein said MN antisense construct shows antisense activity in an in vitro screening assay comprising the steps of:

- a) contacting a human cell abnormally expressing MN with said MN antisense construct;
- b) determining the effect of said MN antisense construct on MN expression in said human cell; and
- c) concluding that if MN expression is decreased, that said MN antisense construct shows antisense activity.

Claim 32 (previously presented): The MN antisense construct of Claim 31, wherein said MN antisense oligonucleotide

is complementary to the 5' end of the mRNA that is transcribed from the complement of SEQ ID NO: 5.

Claim 33 (previously presented): The MN antisense construct of Claim 31, wherein said MN antisense oligonucleotide is complementary to SEQ ID NO: 1.

Claim 34 (previously presented): The MN antisense construct of Claim 31, wherein said vector is derived from a plasmid, a cosmid, a bacteriophage or a virus.

Claim 35 (previously presented): A composition comprising a pharmaceutically acceptable carrier and the MN antisense construct of claim 31, wherein said MN antisense construct interacts with MN gene or MN transcript.

Claims 36-38 (canceled).

Claim 39 (previously presented): A method of blocking in vivo expression of the MN gene in a human by administering an MN antisense construct of claim 31.

Claim 40 (previously presented): A method of treating neoplastic disease and/or pre-neoplastic disease in a human,

wherein said disease is associated with abnormal MN gene expression, comprising inhibiting the expression of MN gene by administering an MN antisense construct according to claim 31.

Claim 41 (withdrawn): An antibody which specifically binds to an MN protein or to an MN polypeptide, wherein said MN protein or MN polypeptide is encoded by a nucleic acid that comprises a polynucleotide containing at least 29 nucleotides, said nucleic acid being selected from the group consisting of:

(a) SEQ ID NO: 5;

(b) polynucleotides that hybridize under stringent conditions to SEQ ID NO: 5's complement; and

(c) polynucleotides that differ from SEQ ID NO: 5 or from the polynucleotide sequences of (b) due to the degeneracy of the genetic code,

and wherein said antibody is polyclonal.

Claim 42 (withdrawn): The antibody of Claim 41 that is conjugated to a toxin.

Claim 43 (withdrawn): The antibody of Claim 41 that is conjugated to a chemotherapeutic drug.

Claim 44 (withdrawn): An antibody which specifically binds to an MN protein or to an MN polypeptide, wherein said MN protein or MN polypeptide is encoded by a nucleic acid that comprises a polynucleotide containing at least 29 nucleotides, said nucleic acid being selected from the group consisting of:

(a) SEQ ID NO: 5;

(b) polynucleotides that hybridize under stringent conditions to SEQ ID NO: 5's complement; and

(c) polynucleotides that differ from SEQ ID NO: 5 or from the polynucleotide sequences of (b) due to the degeneracy of the genetic code,

and wherein said antibody is humanized.

Claim 45 (withdrawn): The antibody of Claim 44 that is conjugated to a toxin.

Claim 46 (withdrawn): The antibody of Claim 44 that is conjugated to a chemotherapeutic drug.

Claim 47 (withdrawn): The antibody of Claim 41 wherein said polyclonal antibody specifically binds to an MN antigen epitope selected from the group of epitopes represented by the following amino acid sequences: SEQ. ID. NOS. 10-16.

Claim 48 (withdrawn): An antibody according to Claim 47 wherein said sequences are SEQ. ID. NOS.: 10, 11 and 12.

Claim 49 (withdrawn): An antibody according to Claim 47 wherein said MN antigen epitope is SEQ. ID. NO.: 10.

Claim 50 (withdrawn): The antibody of Claim 44 wherein said humanized antibody specifically binds to an MN antigen epitope selected from the group of epitopes represented by the following amino acid sequences: SEQ. ID. NOS. 10-16.

Claim 51 (withdrawn): An antibody according to Claim 50 wherein said sequences are SEQ. ID. NOS.: 10, 11 and 12.

Claim 52 (withdrawn): An antibody according to Claim 50 wherein said MN antigen epitope is SEQ. ID. NO.: 10.

Claim 53 (previously presented): The MN antisense construct of claim 31, wherein said promoter comprises a nucleic acid sequence derived from the MN promoter.

Claim 54 (previously presented): The MN antisense construct of Claim 31, wherein said MN antisense oligonucleotide is between 19 and 29 nucleotides in length.

Claim 55 (previously presented): The MN antisense construct of Claim 31, wherein said MN antisense oligonucleotide is selected from the group consisting of SEQ ID NOS: 3, 4 and 7.